



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/580,129	05/19/2006	Andreas Stark	026032-5027	9376
22428 7590 08/17/2011 FOLEY AND LARDNER LLP SUITE 500 3000 K STREET NW WASHINGTON, DC 20007				
EXAMINER				
BLACK, MELISSA ANN				
ART UNIT		PAPER NUMBER		
3612				
MAIL DATE		DELIVERY MODE		
08/17/2011		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/580,129

Applicant(s)

STARK ET AL.

Examiner

MELISSA A. BLACK

Art Unit

3612

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 May 2011.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15-18, 20-31, 33-37, 39, 40 and 42 is/are rejected.
- 7) ☒ Claim(s) 19, 32, 38, 41, 43 and 44 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This office action is in response to amendments and remarks filed May 24, 2011. Claims 15-37 and 39-44 are pending in the application and rejected as set forth below.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 15-18 and 20-24, 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Pat # 2,956,837 to Koplin in view of US Pat #5,542,747 to Burchi.

Re Claim 15, Koplin discloses a vehicle seat (62) for a motor vehicle, comprising: an upholstery part wherein the upholstery part (64) is designed as a seat part wherein the bottom defines a first surface having a first portion shaped to be congruent to a contour of an upper surface of a vehicle floor (20) wherein the seat part is configured to be switchable between a use position the first portion of the first surface of the bottom configured to positively engage with the contour of the upper surface of the vehicle floor (20, see figure 1) when in the use position, and a not-in-use position (see fig 2); and a hinge mechanism (68, 70, 72, 73) configured to release the first portion of the seat part from the vehicle floor and shift the seat part into the not-in-use position (figure 2), and would be capable of wherein the hinge mechanism is connected to the seat part such that the hinge mechanism does not transfer weight of a vehicle occupant into the vehicle floor during a crash, for the force from the weight of the occupant would be to the rear of the contour and the force would all be applied to the contour and not to the hinge, wherein the hinge mechanism is connected to the seat part such that the hinge mechanism only has to absorb

the weight of the seat part while the seat part transitions from the use position to the not-in-use position as seen in figure 2.

Koplin does not specify the material of the upholstery part.

Burchi discloses a vehicle seat made of hard foam part (104) and a soft foam part (108).

Koplin and Burchi are analogous art because they are from the same field of endeavor, i.e., vehicle seats.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to use a hard foam part and a soft foam pad since they are known materials for vehicle seats.

Therefore, it would have been obvious to combine Burchi with Koplin to obtain the invention as specified in claim 15.

Regarding claim 16, Burchi does not disclose that the hard foam part is expanded polypropylene. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use expanded polypropylene, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416. See also Ballas Liquidating Co. v. Allied industries of Kansas, Inc. (DC Kans) 205 USPQ 331.

Regarding claim 17 and 18, Koplin as modified discloses wherein the upper surface (54) of the vehicle floor (20) includes a portion which extends vertically and essentially transversely with respect to a direction of travel of the vehicle; and wherein the first surface of the hard foam part extends approximately parallel to the portion of the upper surface (see figure 1), wherein the portion of the upper surface of the vehicle floor comprises an arch (54), the arch running approximately horizontal and transverse with respect to the direction of travel; and wherein the

first surface of the hard foam part includes a first recess (see figure 1), which runs approximately parallel to the arch (54).

Regarding claim 20, Koplin discloses wherein the hinge mechanism includes a first hinge arm (70) connected at one end in an articulated manner to the vehicle floor (20) and connected at another end in an articulated manner to the hard foam part (@68) such that the seat part moves out of the use position into the not- in-use position, approximately parallel to the seat part in the use position (see figure 2).

Regarding claim 21, Koplin as modified discloses wherein the hinge mechanism includes a first hinge pivotable about a first axis (68) and a second hinge pivotable about a second axis (72), the first hinge coupled to the hard foam part and the second hinge coupled to the vehicle floor (@73).

Regarding Claim 22, Koplin as modified discloses wherein the first hinge is further configured to latch to the hard foam part during installation of the seat part in the vehicle (see figure 1).

Regarding claim 23, Koplin as modified discloses wherein the hard foam part is configured to pivot downward so that the seat part is positionable at an incline (see figure 3).

Regarding claim 24, Koplin as modified discloses wherein the first recess may be inclined at an angle between 25° to 35° with respect to a horizontal axis (Koplin's seat would be capable of pivoting within this range).

4. Claims 25-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Pat # 2,956,837 to Koplin as modified by US Pat #5,542,747 to Burchi in view of US Pat # 5,588,707 to Bolsworth et al

Regarding claims 25-28, Koplin as modified fails to disclose wherein the seat part is operatively connected to a pivotably mounted backrest of the vehicle seat such that, when the backrest is folded forward from a use position into a not-in-use position, the seat part also shifts from the use position of the seat part into the not-in-use position of the seat part, wherein the backrest is connected rotatably to a transmission linkage offset with respect to a pivot axis of the backrest, and wherein the backrest is connected to the transmission link of a second hinge arm, wherein the transmission linkage includes, at an end coupled to the first hinge arm, a rack-like toothing suitable, in conjunction with a circular mating toothing formed on the first hinge arm, for producing a torque about any one of the first hinge and second hinge, wherein the mating toothing is coupled to the second hinge which is also coupled to the vehicle floor.

Bolsworth teaches the vehicle seat part is operatively connected to a pivotably mounted backrest (18) of the vehicle seat in such a manner that, when the backrest (18) is folded forward from the use position into the not-in-use position, the seat part (16) also shifts from the use position into the not-in-use position, the vehicle backrest (18) is connected rotatably to a transmission linkage (56) offset with respect to a pivot axis (62) of the backrest (18), wherein the backrest (18) is connected to the transmission link (56) by means of a second hinge arm (50), the transmission linkage includes, at an end coupled to the hinge arm, a rack-like (46) toothing suitable, in conjunction with a circular mating toothing (44) formed on the hinge arm, for producing a torque about any one of the first hinge and second hinge, the mating toothing (46) is coupled to the second hinge (40) which is also coupled to the vehicle floor (12).

Koplin and Bolsworth are analogous art because they are from the same field of endeavor, i.e., vehicle seats.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to use the linkage/hinge mechanism of Bolsworth since it is a known mechanism for vehicle seats and it is an obvious expedient in the art to exchange one mechanism for another in order to operate the vehicle seat.

Therefore, it would have been obvious to combine Bolsworth with Koplin to obtain the invention as specified in claims 25-28.

5. Claims 29-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Pat # 2,956,837 to Koplin in view of US Patent No. 5,588,707 to Bolsworth.

Regarding claim 29, Koplin discloses a vehicle seat for use in a vehicle having an interior with vehicle floor, comprising: a backrest (66); a seat part (64) configured to be selectively coupled to the vehicle floor and configured to abut an end of the backrest in a use position (see figure 1), wherein the seat part comprises a first and second recess (see figure 1); that are each configured to receive a protrusion from the vehicle floor (54, 65) and would be capable of wherein the hinge mechanism is connected to the seat part such that the hinge mechanism does not transfer weight of a vehicle occupant into the vehicle floor during a crash, for the force from the weight of the occupant would to the rear of the contour and the force would all be applied to the contour and not to the hinge.

Koplin fails to disclose wherein the backrest is configured to recline with respect to the seat part in a rearward direction, away from the seat part, and wherein the backrest is further configured to rotate in a frontward direction, toward the seat part; a transmission link coupled to the seat part and backrest; and a hinge mechanism coupled to the seat part and transmission link, configured to enable the seat part to at least partially pivot about the hinge mechanism; wherein

the hinge mechanism is coupled to a pinion gear engageable with the transmission link in a manner to pivot the seat back in response to the seat part pivoting about the hinge mechanism, wherein the seat part is configured to pivot in the frontward direction into a not-in-use position, coplanar with the use position, wherein the seat part comprises a hard part to which the hinge mechanism is coupled, and wherein the seat part further comprises a soft pad coupled to the hard part, wherein the transmission link is configured to pivot the backrest in the frontward direction as the seat part pivots in the frontward direction, wherein the transmission link is configured to pivot the backrest in the rearward direction as the seat part pivots in the rearward direction, and re claims 35-37 and 39-40, that the transmission link is coupled to a pinion gear.

Bolsworth teaches wherein the backrest (18) is configured to recline with respect to the seat part in a rearward direction, away from the seat part, and wherein the backrest is further configured to rotate in a frontward direction, toward the seat part (Fig. 5); a transmission link (56) coupled to the seat part and backrest; and a hinge mechanism (54) coupled to the seat part (16) and transmission link (56), configured to enable the seat part (16) to at least partially pivot about the hinge mechanism (54); wherein the hinge mechanism (54) is coupled to a pinion gear (40) engageable with the transmission link (56) in a manner to pivot the seat back in response to the seat part pivoting about the hinge mechanism. Regarding claim 30, Bolsworth further teaches, wherein the seat part (16) is configured to pivot in the frontward direction into a not-in-use position, coplanar with the use position (Fig. 5). Regarding claim 31, Bolsworth further teaches, wherein the seat part comprises a hard part (16) to which the hinge mechanism is coupled, and wherein the seat part further comprises a soft pad (above 16) coupled to the hard part. Regarding claim 33, Bolsworth further teaches wherein the transmission link (56) is

configured to pivot the backrest (12) in the frontward direction as the seat part pivots in the frontward direction. Regarding claim 34, Bolsworth further teaches wherein the transmission link (56) is configured to pivot the backrest in the rearward direction as the seat part (16) pivots in the rearward direction. Regarding claims 35-37 and 39-40, Bolsworth further teaches that the transmission link (56) is coupled to a pinion gear (40).

Koplon and Bolsworth are analogous art because they are from the same field of endeavor, i.e., vehicle seats.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to use the linkage/hinge mechanism of Bolsworth since it is a known mechanism for vehicle seats and it is an obvious expedient in the art to exchange one mechanism for another in order to operate the vehicle seat.

Therefore, it would have been obvious to combine Bolsworth with Koplin to obtain the invention as specified in claims 29-31, 33-37 and 39-40.

Allowable Subject Matter

6. Claims 19, 32, 38, 41, 43 and 44 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

7. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Pat # 6,598,926 to Price also discloses a seat that would be capable of wherein the hinge mechanism is connected to the seat part such that the hinge mechanism does not transfer weight of a vehicle occupant into the vehicle floor during a crash, for the force from the weight of the occupant would to the rear of the contour and the force would all be applied to the contour and not to the hinge, for the weight of the occupant would be below the hinge mechanism.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MELISSA A. BLACK whose telephone number is (571)272-4737. The examiner can normally be reached on M-F 7:00-3:30 ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Dayoan can be reached on (571) 272-6659. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/GLENN DAYOAN/
Supervisory Patent Examiner, Art Unit
3612

Application/Control Number: 10/580,129
Art Unit: 3612

Page 10

/Melissa A Black/
Examiner, Art Unit 3612